

State Route 199 Curve Realignment Project



Draft Mitigated Negative Declaration/Initial Study

Caltrans District 1-Del Norte-199-Kilometer Post 43.4 to 44.3

(Post Mile 27.0 to 27.5)

EA 409600

Prepared: July 2004



General Information About This Document

What's in this document?

This document is a Draft Mitigated Negative Declaration/Initial Study (MND/IS), which examines the potential environmental impacts of alternatives for the proposed project located within Del Norte County, California. The document describes why the project is being proposed, the existing environment that could be affected by the project, and potential impacts from each of the alternatives.

What you should do?

- Please read this MND/IS.
- We welcome your comments. If you have any concerns regarding the proposed project, please send your written comments to Caltrans by the deadline. Submit comments via regular mail to Caltrans, Attn: Jody Brown, Environmental Management, 2389 Gateway Oaks, Suite 100, Sacramento, CA 95833; submit comments via email to jody_brown@dot.ca.gov
- Submit comments by the deadline: **September 9, 2004**

What happens after this?

After comments are received from the public and reviewing agencies, Caltrans may (1) give environmental approval to the proposed project, (2) undertake additional environmental review of the project, or (3) abandon the project. If the project were given environmental approval and funding were appropriated; Caltrans could design and construct all or part of the project.

For individuals with sensory disabilities, this document is available in Braille, large print, on audiocassette, or computer disk, as well as on the World Wide Web at <http://www.dot.ca.gov/dist3/departments/envinternet/envdoc.htm>. To obtain a copy in one of these alternate formats, please call or write to Caltrans, Attn: Jody Brown, Environmental Management, 2389 Gateway Oaks, Suite 100, Sacramento, CA 95833; (916) 274-0556 Voice, or use the California Relay Service TTY number, (530) 741-4509.

Draft Mitigated Negative Declaration

State Route 199 Curve Realignment Project



State of California, Department of Transportation

State Clearinghouse # not yet assigned
01-DN-199-KP 43.4/44.3 (PM 27.0/27.5)
Expenditure Authorization (EA) 409600

Prepared pursuant to the California Environmental Quality Act of 1970 (Division 13 of the Public Resources Code)

Project Description: The purpose of this project is to make improvements along a 0.9 kilometer (0.5 mile) segment of State Route 199 in order to alter the existing short tangents, compound curves, and reversing curves. This segment of SR 199 has been identified by the Caltrans offices of Maintenance and Traffic Safety as a candidate for improvements due to the sharpness of the curves and the number of collisions concentrated in a few locations within the project limits. Roadway work will include the construction of the following: retaining walls to straighten associated curves and the installation of changeable message signs equipped with radar to inform travelers of their current speed vs. the posted speed limit. The project is located between Patrick Creek Kilometer Post (KP) 43.4-44.3 (Post Mile [PM] 27.0-27.5), six miles south of the Oregon border.

Determination: An Initial Study (IS) has been prepared by Caltrans. It has been determined that the proposed project will not have a significant affect upon the environment, for the following reasons:

The project will not adversely affect FEMA designated floodplains; water quality, hazardous materials, sensitive plant/animal species, traffic or mineral resources. No change will occur in local and regional air quality, population, or planned land use. Seismic and soil related hazards will not increase, nor will the ambient noise in the region permanently increase. There are no designated historic architectural properties or other cultural resources within the project limits.

The project may have short-term minimal effects upon traffic, scenic resources, and sensitive biological communities; however, project impacts to these resources will be mitigated to a level of insignificance as specified in the mitigation measures contained in the Initial Study.


John Webb
Chief, North Region Office of Environmental Services
California Department of Transportation

Date

State Route 199 Curve Realignment Project
Initial Study
District 1 – Del Norte
Post Mile (PM) 27.0/27.5 Kilometer Post (KP) 43.4/44.3
E.A. 409600

THE STATE OF CALIFORNIA
Dept of Transportation (Caltrans)-District 1
Submitted Pursuant to (State) Division 13, Public Resources Code

30 July 2004
Date of Approval



John D. Webb, Chief
North Region Office of Environmental Services
California Department of Transportation

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List of Abbreviated Terms

§	Section
ACOE	Army Corps of Engineers
APE	Area of Potential Effects
BMPs	Best Management Practices
Caltrans	California Department of Transportation
CDFG	California Department of Fish and Game
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
cm	centimeter
CMS	Changeable Message Sign
CWA	Clean Water Act of 1972
CWHR	California Wildlife Habitat Relationships
dba	Decibel
DBH	Diameter Breast Height
DFR	Douglas Fir
ESA	Environmental Study Area
FHWA	Federal Highway Administration
F&I	Fatality & Injury
FYLF	Foothill Yellow-Legged Frog
ft	feet
HCP	Habitat Conservation Plan
in	inch
IS	Initial Study
ITS	Intelligent Transportation System
km	kilometer(s)
Km/h	Kilometer(s)/hour
KP	kilometer post
m	meter(s)
MAMU	Marbled Murrelet
MBGR	Metal Beam Guard Rail
MHC	Montane Hardwood-Conifer

MHW	Mean High Water
mi	mile(s)
MND/IS	Mitigated Negative Declaration/Initial Study
Mph	Miles per hour
MYLF	Mountain Yellow Legged Frog
NCRWQCB	North Coast Regional Water Quality Board
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NOAA	National Oceanic and Atmospheric Administration
NSO	Northern Spotted Owl
NPDES	National Pollutant Discharge Elimination System
NRLF	Northern Red-Legged Frog
OHWM	Ordinary High Water Mark
PM	post mile
RE	Resident Engineer
ROW	Right-of-Way
SHPO	State Historic Preservation Office
SONCC	Southern Oregon/Northern California Coasts
SR	State Route
STAA	Surface Transportation Assistance Act
SWRCB	State Water Resources Control Board
SWPPP	Storm Water Pollution Prevention Plan
TASAS	Traffic Accident Surveillance and Analysis System
TMP	Caltrans Traffic Management Plan
U.S.	United States
USFS	United States Forest Service, Department of Agriculture
USFS-SRNF	United States Forest Service-Skeletal Road Network Files
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
WSRA	Wild and Scenic River Act

Chapter 1. Purpose & Need

1.1 Project Description

The California Department of Transportation (Caltrans), in conjunction with the Federal Highway Administration (FHWA), is proposing to realign three curves on State Route (SR) 199 in Del Norte County from Kilometer Post (KP) 43.4 to KP 44.3 (Post Mile [PM] 27.0 to 27.5). See Figure 1, page 3, for project vicinity and location mapping. This project is scheduled to be completed over a two-year period during the dry season (May-October). Construction activities the first year will consist primarily of erecting and backfilling the three proposed retaining walls. Work during the second year will consist of roadway rehabilitation and rock chiseling. A rock outcropping along the north side of the roadway near KP 44.3 [PM 27.5] will be chiseled back to increase the Clear Recovery Zone so drivers can avoid hitting the hillside. Three retaining walls will be constructed on the south side of the highway (adjacent to the Smith River) in order to straighten the associated curves. One of these retaining walls is planned where the road is continually failing. The new retaining walls will be aesthetically treated to blend into the surrounding environment as well as provide a safety benefit to the traveling public. The proposed retaining walls will be constructed to accommodate Type 80 concrete barrier rails (concrete bridge rails with openings that are see-through and enhance the visibility of the surrounding landscape). Metal Beam Guard Rail (MBGR) will be attached at each end of the Type 80 barrier rails to prevent vehicles from striking the leading edges of the barriers in either direction. During wall construction of the retaining walls, the northbound lane will be closed to facilitate pile driving from the roadway. Traffic control will consist of a temporary signal systems and one-way reversing traffic control. The lane closure and temporary signal will be moved once after the initial set-up to cover all three retaining wall locations. There will be three equipment staging areas along northbound SR 199; two equipment staging areas along northbound SR 199; and the main construction staging area located at the Caltrans Idlewild Maintenance Station, located at KP 45.5 [PM 28.3]. (See mapping in Appendix C).

1.2 Alternatives

1.2.1. Alternative 1

This alternative proposes to widen and move the existing roadway alignment toward the Middle Fork Smith River through the construction three retaining walls approximately 5m (16ft) to 6m (20ft) high and from 17m (56ft) to 114m (374ft) long adjacent to the river. The roadway would be widened to 3.6m (12ft) lanes with 1.2m (4ft) shoulders. These roadway changes would improve safety by providing large curve radii and increase lateral clearance to the cut banks. The compound curve at retaining wall location 1 would be eliminated and replaced with a single curve with a larger radius. The reverse curves at retaining wall location 3 would be realigned, by moving them away from the cut bank. The following are specific details of the proposed roadway improvements:

- Realign the existing SR 199 toward the Middle Fork Smith River to provide 3.6m (12ft) lanes and 1.2m (4ft) shoulders.
- Constructing three retaining walls (Locations #1, 2 & 3.) on south side of the road (adjacent to the Smith River).
- A rock outcropping along the north side of the roadway near KP 44.3 [PM 27.5] will be chiseled back to increase the Clear Recovery Zone.
- Retaining wall 1 will average 5.0m (16.4 ft) high, 31m (102ft) long.
- Retaining wall 2 will average 5.0m (16.4 ft) high, 110m (361ft) long.
- Retaining wall 3 will average 5.0m (16.4 ft) high, 56m (184ft) long. * *Retaining wall heights are dependent on topography and vary slightly over the length of the wall.*
- Install MBGR to Type 80 Barrier at ends of retaining walls.
- Three trees will be cut/slid down bank with root ball attached near retaining wall 3. The sizes of the trees are as follows: 114cm (45in) Diameter at Breast Height (DBH) Douglas Fir, 127cm (50in) DBH Douglas Fir, 65cm (25.5in) DBH Canyon Live Oak.

1.2.2. Alternative 2

The scope of Alternative 2 is the same as Alternative 1 but includes installation of an electronic warning system, or intelligent transportation system (ITS). The ITS will consist of permanent Changeable Message Signs (CMS) that will be equipped with radar to warn the traveler of the approaching sharp curves, the posted speed limit, and their current speed. The ITS will require solar cells on small poles near or adjacent to the CMS.

1.3 Existing Facility

State Route 199 is a curvilinear two-lane highway traversing the steep and rocky Smith River Canyon. The existing roadway alignment of SR 199 within the project limits was built in the early 1920's. The highway alignment itself is comprised of short tangents, compound curves, reversing curves and narrow shoulders. The existing roadway is asphalt concrete with 3.6m (12ft) wide lanes and shoulders that vary from 1.2m (4ft) to 0.30m (1ft). Curve advisory speeds vary from 32 km/h (20 mph) to 40 km/h (25 mph). State Route 199 in the vicinity of this project is designated as a United States Forest Service (USFS) Scenic Byway as well as a National Recreation Area. Highway attributes include cliffs, rocky outcrops, and a sharp curvilinear alignment, which spans from the north of Patrick Creek to six miles south of the Oregon border, characterizes this area.

1.4 Need and Purpose

This segment of SR 199 has been identified by Traffic Safety and Maintenance as a candidate for safety improvements due to the sharpness of the curves and the number of collisions that are concentrated in a few locations within the project limits. The majority of the collisions are from southbound vehicles traveling at excessive speeds and are characterized as out of control with the points of impact being the cut banks and the guardrails. The roadway curvature after realignment will increase the radii of horizontal curves and eliminate a compound curve at retaining wall Location 1 to enhance the overall safety of both the north and southbound directions of SR 199.

Table 1. Traffic Collision Data

01-DN-199		Number of Collisions				Collision Rate				
						DN 199		Statewide Average		
KP 43.4/44.3 PM 27.0/27.5	Fatal	Inj	F&I	Total	Fatal	F&I	Total	Fatal	F& I	Total
	2	9	11	25	0.89	4.94	11.24	0.03	0.90	1.79

Over a three year period from April 1, 1998, to March 31, 2001, there were 25 collisions (including two fatal and nine injury occurrences) mostly in the southbound direction and on wet pavement. Twenty-one collisions (84%) were concentrated at proposed retaining wall Locations 1 and 3. In most of these collisions, vehicles ran off the road and impacted a cut slope. The highway at locations of collision concentration consists of short radius curves and narrow shoulders adjacent to the cut bank. The actual collision rate within the project limits is more than six times higher than the state average for rural two-lane highways. The proposed road improvements should decrease the collision rate within this roadway segment.

1.5 Consistency with Plans and Policies

The long-range plan for SR 199 in Del Norte County is a two-lane conventional highway with intermittent passing lanes. The “Route Concept Report” (dated July 1999) indicates that Caltrans and Del Norte County Local Transportation Commission have concurred in a long-term strategy to upgrade SR 199 to accommodate large Surface Transportation Assistance Act (STAA) trucks and maintain a 9.6m (32ft) roadway wherever feasible. This project is consistent with the above-mentioned “Route Concept Report”.

1.6 Environmental Setting

The project site is located in a forest setting in the United States Forest Service, Six Rivers National Forest (SRNF) along the Middle Fork Smith River and is located in the Sierra Nevada Floristic Province, Northwestern California Region, Klamath Range Sub region (Hickman 1993). The physical environment is composed of mixed conifer forests and coast redwood (*Sequoia sempervirens*) which include the Western Hemlock (*Tsuga heterophylla*), Sitka Spruce (*Picea sitchensis*), Douglas fir (*Pseudotsuga menziesii*) as well as the less common Port Orford Cedar (*Chamaecyparis lawsoniana*), Tanoak (*Lithocarpus densiflorus*), Madrone (*Arbutus menziesii*), Red Alder (*Arbutus menziesii*), Big Leaf Maple (*Acer macrophyllum*), Vine Maple (*Acercircinatum*), and California bay (*Umbellularia Californica*). Ground cover is dense with a wide range of species and varieties of shrubs, bushes, flowers, ferns, mosses and lichens common to the coast redwood environment. The Smith River enters the Pacific Ocean about 6km (3.5mi) south of the Oregon border and about 644km (400mi) northwest of San Francisco. The Smith River has the greatest annual discharge per square mile of any major California basin. The run-off is estimated at 2.9 million acre-feet annually. It has come to be known as one of the cleanest and pristine rivers in California. The Smith River watershed is about 182,961 hectares (452,091 acres) large and the average yearly precipitation in the watershed is 256.2cm (100.9in) most of which falls between October

and March. The climate fluctuates with the seasons with warm dry summers and cool wet winters. Elevation in the project area is 365m (1200ft).

1.7 Scenic Byway

The Smith River Scenic Byway is 53km (33mi) long and is the shortest route in the 10-route USFS Scenic Byway Network. It encompasses spectacular views of majestic redwood forests and the jade green waters of the crystal-clear Smith River. There is the ancient redwood grove of Jedediah Smith State Park, named after the famous mountain man and explorer said to be the first European to come to California overland. In a subtle change in scenery, redwoods and rolling hills are replaced with Douglas fir-covered ridges and steep canyons. The middle and south forks of the Smith River come together at an area known as the "Forks". The Smith River is the purest river in California and one of the only remaining free-flowing river systems in the State. Its unique, light green color is the result of exceptionally clean, sediment-free water flowing over a smooth granite river bottom. The closeness of the highway to the river and numerous turnouts along the route allow motorists to view deep green pools contrasted against white water rapids. The route continues to parallel the Middle Fork of the Smith River. Two notable geographic sights along the way are the gigantic, rounded boulders of the "Gorge" just north of the Forks and a section of steep, moss-covered river canyon north of Patrick's Creek called the "Narrows." Winter brings heavy rains and a number of cascading waterfalls along the route. The area is a haven for birds and birdwatchers. The Smith River Scenic Byway officially ends at Collier Tunnel at the edge of the Smith River Watershed just short of the California/Oregon border.

1.8 Wild and Scenic River

The project is within the Smith River Wild and Scenic River corridor managed by the USFS and is protected by the Wild and Scenic Rivers Act (WSRA) of 1968. The National Park Service states, "The idea is not to halt development and use of a river; instead, the goal is to preserve the character of the river. Compatible uses with the management goals of the river are allowed and change is expected to happen. Development not damaging to the outstanding resources of the designated river, or curtailing its free flow, are usually allowed". (<http://www.nps.gov/rivers/about.html>) The project will not substantially affect any of the Wild and Scenic resources. As manager of the resource, the USFS granted concurrence of this project with the WSRA on July 9, 2004 (See Appendix E).

1.9 Section 4(f)

Section 4(f) of the Department of Transportation Act of 1966, codified in federal law at 49 U.S.C. 303, declares that “it is the policy of the United States Government that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites.”

Section 4(f) specifies that the Secretary [of Transportation] may approve a transportation program or project...requiring the use of publicly owned land of the public park, recreation area, or wildlife and waterfowl refuge of national, State, or local significance, or land of an historic site of national, State or local significance (as determined by the federal, state, or local officials having jurisdiction over the park, area, refuge, or site) only if:

- There is no prudent and feasible alternative to using that land.
- The program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use.

Temporary construction easements are required from the USFS and the project is within the Smith River National Recreation Area and a Wild and Scenic River corridor. However, the project will not affect any public access to the river or river recreation activities such as fishing or boating. There are no designated river access or public trails within the project limits. Therefore, there will not be Section 4(f) involvement for this project. The permits and approvals for the project are outlined in Table 2.

Table 2. Permit & Approvals Needed

Agency	Permit/Approval	Status
United States Fish and Wildlife Service	Section 7 Consultation for Threatened and Endangered Species	Non-jeopardy concurrence letter issued on June 3, 2004.
National Oceanic Atmosphere Administration (NOAA)	Section 7 Consultation for Threatened and Endangered Species	Non-jeopardy concurrence letter issued on May 4, 2004.
United States Army Corps of Engineers	Section 404 Permit for filling or dredging waters of the United States.	Application for Section 404 Permit anticipated after final Environmental Document distribution.
North Coast Regional Water Quality Control Board (NCRWQCB)	Section 401 Certification	Section 401 Certification applied for concurrently with 404 permit.
California Department of Fish and Game	Section 1602 Streambed Alteration Agreement	Section 1602 Streambed Alteration Agreement applied for concurrently with 404 Permit and 401 Certification.

Table 3. Summary of Impacts to Resources and Mitigation, Minimization, and Avoidance Measures

Resource	Potential Impacts	Mitigation, Minimization, and Avoidance Measures
Aesthetics/Visual Resources (see also section 2.1)	<ul style="list-style-type: none"> Visual impacts to the Scenic Byway from the installation of new concrete barriers and retaining walls. Vegetation removal may impact aesthetics of surrounding environment. Metal Beam Guard Rail is reflective and may not blend in with surrounding forest environment. 	<ul style="list-style-type: none"> All three proposed retaining walls will have identical treatments as the Type 80 barriers. Disturbed soils will receive erosion/sediment control, which includes hydro seeding, fiber rolls and other soil stabilization measures. During construction as well as post construction re-vegetation efforts will consist only of native species. Mature trees that will be cut will be replaced at a ratio of 1 seedling for each 1 inch of DBH removed. The MBGR surface will be treated to remove its shine.
Biological Resources (see also section 2.2)	<ul style="list-style-type: none"> Approximately 0.002 hectare (0.005 acre) of jurisdictional waters will be affected during construction from culvert extension. Project construction will result in a minimal loss of habitat or reductions in the habitat quality or timing of nesting, denning, roosting and/or foraging opportunities for fish and wildlife species. Temporary increase in ambient noise levels associated with construction activities including rock chiseling, boring, grading and culvert placement could spatially affect wildlife. 	<ul style="list-style-type: none"> Erosion control measures will be implemented with sterile or certified weed-free applications. Only clean and washed construction equipment will be permitted to enter the the construction area. Caltrans or its contractors will limit in-water construction activities at the unnamed stream at KP 43.58 (PM 27.08) to the low or no-flow period (between June 1 and October 15 or before the onset of winter). The three trees that will be removed will be slid into the Smith River after being cut to provide resting and rearing habitat for migrating fish species. Construction activities will be restricted within two (2) hours of sunrise and sunset during critical breeding season for MAMU (April 1st – August 5th) and NSO (March 1st – June 30th). Mufflers and noise attenuation devices will be maintained on all construction equipment and vehicles, as will screens around air compressors. If construction activities create a visible plume in surface waters, a silt barrier will be constructed downstream of the construction area.

Resource	Potential Impacts	Mitigation, Minimization, and Avoidance Measures
		<ul style="list-style-type: none"> A spill-response plan will be created to prevent raw cement, concrete or concrete washings, asphalt, paint or other coating materials, oil or other petroleum products contaminating the soil or entering watercourses, drainages and waterways.
Hazards and Hazardous Materials (see also section 2.3)	<ul style="list-style-type: none"> Accidental release of Hazardous materials 	<ul style="list-style-type: none"> Construction contractor, or the contractor's listed environmental sub-contractor, shall prepare a Site Safety Plan. The Site Safety Plan, at a minimum, must identify, evaluate, and control safety and health hazards, and provide for emergency response for hazardous waste operations.
Noise Affects (see also section 2.4)	<ul style="list-style-type: none"> Temporarily increased noise levels could affect wildlife within the project vicinity. 	<ul style="list-style-type: none"> Same as for biological resources.
Hydrology and Water Quality (see also section 2.5)	<ul style="list-style-type: none"> Potential for erosion or siltation on or off the project site during construction. 	<ul style="list-style-type: none"> Preparation of a SWPPP that details the monitoring and implementation of BMPs for erosion and siltation prevention. Special conditions in the ACOE 404 permit, CDFG 1602 permit and NCRWQCB certification will have to be adhered to.

Chapter 2. Affected Environment/Impacts & Mitigation, Minimization and Avoidance Measures

The focus of this discussion uses the Environmental Checklist Form Appendix B. The numbers following each title refer to the numbers of the questions in the checklist. Since the two proposed alternatives would have essentially the same effects on the existing resources and are within the same area of study, please consider all mitigation, minimization, and avoidance measures applicable to both alternatives. Technical studies were completed for the environmental resource areas discussed in the following subparagraphs. These studies are incorporated by reference into the discussion below, and are available for review at the Caltrans North Region Office of Environmental Management at 2389 Gateway Oaks Drive in Sacramento, CA 95833.

2.1. Aesthetic/Visual I (b, c, d)

This section of SR 199 is a USFS scenic byway, as well as a National Recreation Area, and passes through a steep narrow canyon created by the Middle Fork of the Smith River, which is a designated Wild and Scenic River. The main focal point along SR 199 is the Smith River, which flows approximately 30.18m (100ft) below the existing alignment. (See also sections 1.6-1.8 of this IS).

2.1.1. Affected Environment/Impacts

Construction of the proposed highway improvements will not have any significant direct, indirect, or cumulative impacts on the aesthetics of the surrounding environment.

Three retaining walls will be constructed using soldier piles with timber lagging. Architectural treatment to the retaining wall and foundation of the Type 80 barrier railing will be composed of concrete that is form-lined and stained to appear as stone or rock. The upper rail of the Type 80 barrier railing will also be formed and stained to appear as timber lagging. Impacts to existing vegetation will be minimal and only require three mature trees (two Douglas Fir and one Canyon live oak) adjacent to retaining wall Location 3 to be cut and slid down highway embankment with the root ball attached.

Temporary impacts created during project construction will include area used for staging of equipment and materials. Passing vehicles will observe the storage of heavy equipment, soil, aggregate and other materials required in the construction of the retaining walls and metal beam guardrails. Temporary erosion control measures such as straw bales and fabric used where materials are stored will also be visible from the

roadway. Temporary traffic signage will be used to direct motorists through the construction site. Although the temporary traffic signals will not blend into the surrounding landscape, they are required for traffic safety and will not create adverse visual impacts. These temporary visual impacts are part of the general construction landscape and do not require mitigation.

2.1.2. Mitigation, Minimization, and Avoidance Measures

Although the project will not have a significant impact on visual resources, the following measures will be implemented as part of the design of the project to ensure compliance with the USFS Scenic Byway “rustic theme”:

- All three proposed retaining walls will be visible from the Smith River, which flows immediately south of the existing alignment. The retaining walls will have identical treatments as the Type 80 barriers and will ensure the views as seen from the Smith River are less than significant.
- Impacts to adjacent vegetation will be minimized during construction. All disturbed soils will receive erosion/sediment control, which includes hydro seeding, fiber rolls and other soil stabilization measures (see also section 2.5). Furthermore, erosion control during construction as well as post construction re-vegetation efforts will consist only of native species.
- Three mature trees (2 Douglas Fir and 1 Canyon live oak) will be cut and slid down the highway embankment with the root ball attached adjacent to retaining wall Location 3. The trees will be replaced at a ratio of 1 seedling for each 1 inch of Diameter at Breast Height (DBH) removed.
- The Metal Beam Guard Rail surface will be treated to remove its shine.

2.2. Biological/Natural Resources IV (a, b, c, d)

The California Natural Diversity Data Base Version 2.1.2 (CDFG 2000a) was queried to compile a list of possible special status fish species present in the project area. The Shelley Creek Ridge USGS 7.5 minute topographic quadrangle was used to query this database. A special status species list was also obtained from National Oceanic and Atmospheric Administration (NOAA) Fisheries and the USFS, Skeletal Road Network

Files. Caltrans biologists compared specific habitat requirements, life history notes, elevation, species distribution, and species lists to determine if any special status fish species may be present in the project vicinity. Biological surveys were conducted in the project area on March 17, 2003, March 18, 2003, July 7, 2003, and July 8, 2003, culminating in a Natural Environment Study Report dated December 30, 2003.

2.2.1. Affected Environment/Impacts

Construction of the proposed curve realignment may result in the following temporary impacts to biological resources discussed below. Construction of the proposed highway improvements will not have any significant direct, indirect, or cumulative impacts on the biological resources of the surrounding environment.

2.2.1.1 Jurisdictional Waters and Streambed Alteration

The Ordinary High Water Mark (OHWM) delineates the limits of “Water of the United States” within the project. Work along the State Route at an unnamed stream at KP 43.58 (PM 27.08) will be below the OHWM and will be under the Army Corps of Engineers (ACOE) jurisdiction. Natural drainage features fall under the jurisdiction of the ACOE, and as such will require a Clean Water Act Section (§) 404 Nationwide permit from the ACOE and accompanying § 401 Water Quality Certification from the North Coast Regional Water Quality Board (NCRWQCB). Work below the top of the bank in these drainages will also require a § 1602 Streambed Alteration Agreement from the California Department of Fish and Game (CDFG). Construction activities will result in the temporary disturbance of approximately 0.002 hectare (0.005 acre) of jurisdictional waters adjacent to the aforementioned unnamed creek. This unnamed creek is culverted under SR 199 and flows into the Middle Fork Smith River. No ACOE jurisdictional waters along the Middle Fork Smith River will be impacted. All work along this portion of the project will be above the Smith River OHWM and Caltrans Best Management Practices (BMPs) will be in place to prevent negative impacts.

2.2.1.2 Invasive Species

There were no invasive plant species (common weeds) detected within the project area. However, BMPs will be implemented to aid in keeping this area invasive species free.

2.2.1.3 Fish and Wildlife

Chinook (*Oncorhynchus tshawytscha*), Coho (*Oncorhynchus kisutch*), Steelhead (*Oncorhynchus mykiss*) and Cutthroat Salmon (*Oncorhynchus clarki*) are present within the Middle Fork Smith River.

There are no records of Northern Spotted Owl (NSO) and Marbled Murrelet (MAMU) occurring in the project vicinity. In assessing potential impacts from construction noise, one must assume that either (1) NSO and MAMU (as well as other wildlife) have largely acclimated to ambient traffic noise, or (2) wildlife has not acclimated to ambient traffic noise resulting in a decrease in habitat values (and use by wildlife bordering the highway). In either case, any temporary increase in noise due to construction would be incremental and not have the same magnitude of effect on any wildlife populations, specifically NSO and MAMU, as would a high noise level in an otherwise quiet habitat area. The nearest known NSO nesting site is located along Monkey Creek approximately 2.2km (1.5mi) west of the project site. Suitable nesting and foraging habitat for the spotted owl may exist in the project vicinity. The nearest known MAMU site is approximately 13km (8mi) west of the project site. There are no known sites in the Shelley Creek Ridge USGS 7.5 minute quadrangle map.

There are records of Northern Red-Legged Frog (NRLF) and Foothill Yellow-Legged Frog (FYLF) occurring in the actual project area.

Caltrans has informally consulted with the United States Fish and Wildlife Service (USFWS) and NOAA Fisheries and through these consultations, both resource agencies have determined that the proposed activities would result in a minimal loss of habitat or reductions in the habitat quality or timing of nesting, denning, roosting and/or foraging opportunities for the aforementioned fish and wildlife species. (See NOAA Fisheries and USFWS concurrence letters in Appendix F).

The following is a list of proposed activities and associated impacts:

- Removal of vegetation will affect the stability of soils, the existing amount of shade, feeding, cover and reproduction of habitat for wildlife on the upper banks of Middle Fork Smith River.
- Temporary increase in ambient noise levels associated with construction activities including rock chiseling, boring, grading and culvert placement could spatially affect wildlife.
- Short-term increases in suspended sediment concentration and turbidity resulting from channel disturbance could potentially cause suffocation of egg masses.
- Amphibians and/or reptiles if detected during in water construction activities at the unnamed stream at KP 43.58 (PM 27.08) may be affected by construction work.
- Hazardous materials such as asphalt, paint, or other petroleum products may enter streams or drainages and could affect aquatic life.

2.2.2. Mitigation, Minimization, and Avoidance Measures

Although no significant impacts are expected, the following minimization, avoidance and mitigation measures will be implemented to reduce the potential for direct, indirect, and cumulative impacts to biological resources within the project area to a level of insignificance. The mitigation measures will be grouped according to the potential impacts that they pertain to: i.e. Jurisdictional Waters, Noxious Weeds, and Fish and Wildlife.

- (Noxious Weeds) In areas of ground disturbance, erosion control measures will be implemented with sterile or certified weed-free applications.
- (Noxious Weeds) Only clean and washed construction equipment will be permitted to enter the the construction area, in order to reduce the potential of introducing invasive or non-native plant species into the project area to comply with Executive Order #13112 (Invasive Species).
- (Fish & Wildlife) To reduce the potential for impacts on amphibians and reptiles associated with construction activities, Caltrans or its contractors will limit in-water construction activities at the unnamed stream at KP 43.58 (PM 27.08) to the low or no-flow period (between June 1 and October 15 or before the onset of winter).

- (Fish & Wildlife) The three trees that will be removed will be slid into the Smith River after being cut to provide resting and rearing habitat for migrating fish species (See NOAA fisheries concurrence letter in Appendix F).
- (Fish & Wildlife) Data collected using general and intensive survey techniques found the MAMU and NSO were most active between 45 minutes before and 75 minutes after sunrise and were rarely detected more than one (1) hour before sunrise (Naslund and O'Donnell 1995). Evening activity period were greatest from 20-30 minutes (up to 90 minutes) after sunset (Naslund and O'Donnell 1995). Therefore, construction activities will be restricted within two (2) hours of sunrise and sunset during critical breeding season for MAMU (April 1st – August 5th) and NSO (March 1st – June 30th). Mufflers and noise attenuation devices will be maintained on all construction equipment and vehicles, as will screens around air compressors.
- (Jurisdictional Waters) Staging and storage areas have been located outside the stream zones to avoid accidental contact of equipment, fuels, lubricants, solvents and other possible contaminants.
- (Jurisdictional Waters) If construction activities create a visible plume in surface waters, a silt barrier will be constructed downstream of the construction area.
- (Jurisdictional Waters) Measures will be employed to prevent any hazardous or toxic material control from entering any streams or drainages with the preparation of a spill-response plan. The plan will prevent raw cement, concrete or concrete washings, asphalt, paint or other coating materials, oil or other petroleum products or any other substance that could be hazardous to aquatic life from contaminating the soil or entering watercourses, drainages and waterways (see also section 2.3).
- (Jurisdictional Waters) Upon completion of construction of the curve realignment, the stream banks and riparian vegetation will be permanently stabilized.

2.3. Hazards and Hazardous Materials VII (b)

2.3.1 Affected Environment/Impacts

According to the Naturally Occurring Asbestos and Site Investigation Reports, prepared in March of 2001, no direct, indirect, or cumulative impacts are expected to occur from contact with or release of hazardous materials.

2.3.1.1 Native Hazardous Materials

Caltrans geotechnical reports and California Department of Mines and Geology Geologic Maps indicate that serpentine rock exists within the project area. As explained by the Air Resources Board (ARB) rules, serpentine material refers to any material that contains at least 10 percent serpentine, and asbestos containing serpentine refers to serpentine materials with asbestos content greater than 0.25 percent as determined by ARB Test Method 435. Title 17 of the California Code of Regulations (CCR) Section 94147 prohibits the use of serpentine material for road surfacing in California, unless the material has been tested and determined to have an asbestos content of 0.25 percent or less. In February 2001, a collection of eight soil and twenty-two rock chips samples (SS-1 through SS-8 and RC1 through RC 22) were collected. The samples were then laboratory tested to determine asbestos content.

Based on the lack of detectable asbestos content in soil samples SS-1 through SS8, soil materials generated during construction activities at the site should be suitable for reuse and/or offsite disposal with no restrictions.

Based on lack of detectable asbestos content in rock chip samples RC1 through RC10 and RC16 through RC 22 within the project location. In addition, because of the less than .25% in RC 11-15, excavated rock material generated during construction activities within the project site should be suitable for reuse and/or offsite disposal with no restrictions.

2.3.1.2 Potential Hazards

It is standard Caltrans procedure to have the construction contractor, or the contractor's listed environmental sub-contractor, shall prepare, and submit for approval, a Site Safety Plan consistent with the requirements of 29 Code of Federal Regulations 1910.120. The Site Safety Plan, at a minimum, must identify, evaluate, and control safety and health hazards, and provide for emergency response for hazardous waste operations. Therefore measures will be implemented during construction to ensure that a release of asbestos,

lead, hydrocarbons, or other hazardous material is reduced to the greatest extent practicable and in the event of an accidental release of hazardous materials an emergency response plan is readily available and executed.

2.4. Noise XI (d)

2.4.1 Affected Environment/Impacts

A noise study was conducted to establish existing noise levels on the project segment of SR 199. The study shows that current average ambient noise levels range between 55.3 and 68.2 decibels (dBA) along the curve realignment project route. Diesel logging tractor-trailers are common along SR 199 and can produce 90dBA. Various construction equipment at the proposed project site, could result in temporary noise levels up to approximately 88dBA as indicated in Table 4. These temporarily increased noise levels could affect wildlife within the project vicinity (please see section 2.2 for additional information on wildlife impacts). No other sensitive receptors, such as housing, schools, or hospitals exist within the project area that could be affected by temporary noise increases during construction.

Table 4. Construction Equipment Noise

Bulldozers	85dBA at 15.24 m (50ft)
Heavy Trucks	88dBA at 15.24 m (50ft)
Backhoe	80dBA at 15.24 m (50ft)
Pneumatic tools	85dBA at 15.24 m (50ft)
Concrete pump	82dBA at 15.24 m (50ft)

When sound propagates over a distance, it changes in level and frequency content. The manner in which noise reduces with distance depends on the following factors:

- **Geometric Spreading** Sound from a small, localized source radiates uniformly outward as it travels away from the source in a spherical patterns. The sound level drops off at a rate of 6dBA for each doubling of distance. For example, a bulldozer that makes 85dBA at 15.24m (50ft) will only sound like 79dBA at 30.5m (100ft).
- **Ground Absorption** The noise path between the highway and the observer is usually very close to the ground. Noise attenuation from ground absorption and reflective-wave canceling adds to the attenuation associated with geometric spreading. Traditionally, the excess attenuation has also been expressed in terms of attenuation per

doubling of distance. This approximation is done for simplification only because prediction results based on this scheme are sufficiently accurate for distances of less than 60m (200ft). For acoustically hard sites (i.e., those sites with a reflective surface, such as a parking lot or a smooth body of water, between the source and the receiver), no excess ground attenuation is assumed. For acoustically absorptive or soft sites (i.e., those sites with an absorptive ground surface, such as soft dirt, grass, or scattered bushes and trees, between the source and the receiver), an excess ground-attenuation value of 1.5dBA per doubling of distance is normally assumed. When added to the geometric spreading, the excess ground attenuation results in an overall drop-off rate of 4.5dBA per doubling of distance for a line source and 7.5dBA per doubling of distance for a point source.

- **Atmospheric Effects** Research by Caltrans and others has shown that atmospheric conditions can have a significant effect on noise levels within 60m (200ft) of a highway.
- **Natural/Human Made Shielding** A large object or barrier in the path between a noise source and a receiver can substantially attenuate noise levels at the receiver. Natural terrain features (e.g., hills and dense woods) and human-made features (e.g., buildings and walls) can substantially reduce noise levels. A barrier that breaks the line of sight between source and a receiver will typically result in at least 5dBA of noise reduction. A taller barrier may provide as much as 20dBA of noise reductions.

2.4.2 Mitigation, Minimization, and Avoidance Measures

- Restrict construction activities within two (2) hours of sunrise and sunset during the critical breeding season for Marbled Murrelet (April 1st – August 5th) and Northern Spotted Owls (March 1st – June 30th). This measure will avoid the peak activity periods of MAMU and NSO.

- Install and maintain mufflers and noise attenuation devices on all construction equipment and vehicles.
- Use portable wooden noise screens to minimize particularly noisy operations. For example, installing a screen around air compressors.
- Maintain the construction equipment, and ensure that vehicles are in good working order.

2.5. Hydrology & Water Quality VIII (c)

2.5.1 Affected Environment/Impacts

Field investigations conducted by a Caltrans Water Quality Specialist determined that the proposed project would not have any significant direct, indirect, or cumulative impacts on water quality or hydrology within the project area. The designated Caltrans contractor is required to implement BMPs that can be found in the Storm Water Project Planning and Design Guide or in Section 7-1.01G of the Caltrans Standard Specifications handbook, to decrease the possibility of erosion or siltation on or off the project site during construction. Some examples of temporary sediment control BMPs that will be implemented are silt fences, gravel bags, sandbag barriers, and straw bale barriers. Furthermore, Caltrans is required to adhere to the conditions of the Caltrans Statewide National Pollution Discharge Elimination System (NPDES) Permit issued by the State Water Resources Control Board (SWRCB) and adhere to the compliance requirements of the Construction General Permit. The main requirement of the Statewide NPDES permit is to submit a Storm Water Pollution Prevention Plan (SWPPP), detailed monitoring plan and notice of construction to the NCRWQCB. Lastly, since the project will be near and in the waters of the U.S., special conditions in the ACOE § 404 permit, CDFG § 1602 permit and NCRWQCB certification will have to be adhered to. Combined, these standard measures will ensure that there will be no impacts that could significantly alter the existing drainage patterns or cause substantial amounts of erosion or siltation within the project limits. Provisions are outlined in the following section.

2.5.2 Mitigation, Minimization, and Avoidance Measures

Although no significant impacts are expected, the following measures will further reduce the level of hydrology and water quality impacts.

- Barriers adequate to prevent the flow of muddy water into streams shall be constructed and maintained between working areas and streams, and during construction of the barriers, muddying streams shall be held to a minimum.
- Water containing mud or silt from aggregate washing or other operations shall be treated by filtration, or detention in a settling pond or in ponds adequate to prevent muddy water from entering live streams.
- Oily or greasy substances originating from the contractor's operations shall not be allowed to enter or be placed where they will later enter a live stream.
- Material derived from roadway work shall not be deposited in a live stream channel where it could be washed away by high stream flows.

2.6. Cultural Resources

Cultural or Archaeological Resources as used in this document refers to historic and archaeological resources. There will not be any direct, indirect, or cumulative impacts on cultural resources as a result of this project. The primary laws dealing with historic and archaeological resources include:

- The National Historic Preservation Act, as amended, (NHPA) sets forth national policy and procedures regarding “historic properties” – that is districts, sites, buildings, structures and objects included in or eligible for the National Register of Historic Places. Section 106 NHPA requires federal agencies, or agencies with federal funding, to consider the effects of their undertakings on such properties, following regulations issued by the Advisory Council of Historic Preservation (36 CFR 800). FHWA is participating in this project and must meet the consultation requirements of section 106 of the National Historic Preservation Act. The proposed project, therefore, is a federal undertaking subject to 36 CFR Part 800, implementing regulations for 106.
- Under California law, cultural resources are protected by CEQA as well as Public Resources Code Section 5024.1, which established the California Register of Historic Places. Code Section 5024.5 requires state agencies to provide notice to, and to confer with the State Historic Preservation Officer (SHPO) before altering, transferring, relocation, or demolishing state-owned historic resources.
- If human remains are discovered, State Health and Safety Code Section 7050.5 states that disturbances and activities shall cease. The County Coroner must be notified of

the find immediately so that he/she may ascertain the origin. Pursuant to Public Resources Code Section 5097.98 if the remains are thought to be Native American, then the coroner will notify the Native American Heritage Commission (NAHC) who will then notify the Most Likely Descendent (MLD). The MLD may inspect the remains with the approval of the landowner or the landowner's authorized representative. The MLD must complete the inspection within 24 hours after notification by the NAHC. The MLD may recommend scientific removal and nondestructive analysis.

Archival research at the North Coast Information Center of the California Historical Resources Information Service Centers identified four archaeological surveys, which had been conducted within 0.8-kilometer (0.5-mile) of the project area. One archaeological site was also identified within 0.8-kilometers (0.5-mile) of the project area consisting of an historic trail. When mapped by the Northwest Information Center none of the archaeological sites fell within the projects APE. National Register of Historic Places - 1979-1998, California Register of Historical Resources - 1997, California Inventory of Historic Resources - 1979, California Historical Landmarks - 1996, Archaeological Site Records - A record search was conducted at the Northwest Information Center Yurok Tribe of the California Historical Resources Information System in May 14, 2003. The record search review was conducted by Information Center personnel and resulted in the identification of four surveys and one cultural resource that occur within the 0.5 mile (0.8 kilometer) radius of the Area of Potential Effects (APE). The cultural resource is described as a historic trail and is located .125 mile (0.2 kilometers) northwest of the project.

A pedestrian survey of the APE was conducted on July 8, 2003 in an effort to identify cultural resources within the APE. The APE takes into account the limits of the proposed construction, including both existing and proposed new right of way, as well as all staging and deposition areas. No archaeological resources were identified. The survey resulted in the identification of two masonry walls and three wooden wall/guard rail structures. The walls were evaluated by Caltrans Division of Environmental Analysis, PQS PI Architectural History. They were found to be exempt from further study pursuant to Stipulation VII and Attachment 4 (Property Type 1) of the Programmatic Agreement among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the NHPA Programmatic Agreement.

2.7. Traffic Handling During Construction

2.7.1 Affected Environmental/Impacts

According to the June 9, 2004 Traffic Management Plan Data Sheet for the project, no significant direct, indirect, or cumulative impacts are anticipated to occur to transportation and traffic based on the information below.

No delays longer than 30 minutes are anticipated for the project. In accordance with Caltrans Deputy Directive-60, District Lane Closure Review Committee approval is not required for projects whose anticipated traffic delay is less than 30 minutes. If congestion or delays exceed original estimates due to unforeseen events such as work-zone collisions, higher than predicted traffic demand, or closures of an extended duration, there is a contingency plan established where, the contractor or Resident Engineer shall use all appropriate resources to restore or minimize effects on traffic such as:

- Calling for CHP or other emergency personnel in the event of a work-zone collision.
- Picking up the lane closure as soon as it is safe to do so to prevent significant delay.
- Assigning personnel to work end-of near the end of the traffic queue.
- The Resident Engineer should communicate and cooperate with local emergency services to ensure that no area is isolated from needed services, and that emergency access is immediately granted through the construction zone.

Chapter 3 Cumulative Impacts

Cumulative impacts are those that are produced by the aggregation of individual environmental impacts resulting from a single project or from two or more projects in conjunction. Analysis of cumulative impacts is required under the California Resources Agency Guidelines, Title 14, § 15130 and § 15355. The following is an excerpt from § 15355 and explains what cumulative impacts are:

Cumulative impacts refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. The cumulative impact from several projects is the change in the environment, which results from the incremental impacts of the projects when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.

CEQA details two ways in which to evaluate cumulative impacts. One of these is to summarize growth projections in an adopted general plan or in a prior certified environmental document. The second method, which will be utilized for this Initial Study, involves the compilation of a list of projects producing related or cumulative impacts [please see Section 15130 B 1(a) of the CEQA guidelines]. The projects considered for this cumulative impact analysis are listed in Table 5.

State Route 199 is part of the National Highway System, linking SR 101 near Crescent City and at its western terminus with Interstate 5 within the city of Grants Pass, Oregon, on its eastern terminus. It is a principal arterial, serving both interregional and interstate traffic. It is used primarily for interstate travel, recreational purposes, and the movement of goods. No major improvement projects are programmed for SR 199. According to the 1999 Caltrans *Route Concept Report* proposed or planned future projects along SR 199 are listed in order of priority in Table 5.

Table 5. Cumulative Projects List

#1 Priority:
• Shoulder widening and/or realignment at “The Narrows” (PM 22.4/23.2) KP 36.0/37.3.
• Shoulder widening and/or realignment at bridge over “Middle Fork Smith River” PM 23.9/24.2 (KP 38.5/38.9).
• Shoulder widening and/or realignment at “Washington Hill” (PM 26.1/26.3) KP 42.0/42.3.
• Realignment at “Windy Point” (PM 26.7/26.9) KP 43.0/43.3.
#2 Priority
• Work at slide near Hiouchi (PM 6.3) KP 10.1.
• Slide work at “Blue Slide” (PM 23.8) KP 38.3.
#3 Priority
• Consider passing or truck climbing lane at (PM 8.8/11.1) KP 14.2/16.3.
#4 Priority
• Shoulder widening and possible realignment at (PM 3.3/5.0) KP 5.3/8.1.
• Cantilevered guard rails at (PM 5.6/6.0) KP 9.0/9.7.
#6 Priority
• Road Widening Improvements to address Surface Transportation Assistance Act (STAA) truck traffic at:
• (PM 8.2/9.8) KP 13.2/15.8.
• (PM 20.5/20.9) KP 33.0/33.6 and PM 25.4/25.6 KP 40.9/41.2.

The current project is being constructed to improve safety due to the sharpness of curves and the number of collisions concentrated in a few locations within the project limits. No capacity increasing improvements are proposed and there will be no quantifiable habitat loss. There are no anticipated cumulative impacts likely to occur to any resources due to the proposed current action.

All of the aforementioned projects are safety and maintenance related projects, and none are capacity increasing projects. Nor would these projects significantly or cumulatively increase the physical environmental impacts that the highway has on surrounding area adjacent to the highway.

Chapter 4 **List of Preparers**

The North Region of the California Department of Transportation prepared this Negative Declaration/Initial Study (ND/IS). The following Caltrans staff prepared this MND/IS:

Brown, Jody, Senior Environmental Planner. B.A. in Anthropology, UC Berkley; M.A. in Anthropology, University of Michigan; 22 years experience in Archaeology. Contribution: Project Senior Environmental Planner, responsible for review of all environmental and technical studies.

Burg, Richard, Associate Environmental Planner (Natural Sciences). B.S. in Wildlife Management, from Humboldt State University; 9 years of experience in biology. Contribution: Project Biologist; Natural Environmental Study.

Grandy, Dwayne, Transportation Civil Engineer, 5 years preparing Initial Site Assessments. B.S. Degree in Environmental Engineering from Humboldt State University.

Hakim, Hamid, Transportation Engineer. Applied and Environmental Microbiology, Ph.D., PE, Ohio State University, Columbus; Environmental Engineering, M.S. in progress, California State University, Sacramento; 11 years of experience in Environmental Engineering. Contribution: Project Water Quality Specialist; Water Quality Report.

Hibbert, Jim, Associate Landscape Architect, 4½ years preparing Visual Impacts Assessments. B.A. in Geography from University of Alaska-Fairbanks in 1992, 2nd BLA Landscape Architecture from University of Oregon in 1998. Contribution: Visual Impact Assessment.

Lukkarila, Michele, Associate Environmental Planner (Natural Sciences). B.S. in Biology, Northern Michigan University, Marquette; 4 years experience in field investigations/surveys and preparing environmental documents.

Miranda, Francisco, Project Engineer. MS Civil Engineering, Illinois Institute of Technology; 14 years of combined experience in Transportation Planning, Traffic Studies, and Highway Design. Registered Civil Engineer in the State of California. Contribution: project plans and mapping.

Pommerenck, Keith, Civil Engineer, CT. B.S. in Environmental Resources, California State University, Sacramento. 2 years experience in design and 19 years in environmental doing noise studies, air quality, vibration and hazardous waste work. Contribution: Traffic Noise Monitoring Data Log Sheet Assessment.

Rosas, Robert Jr., Environmental Planner. B.A. in Social Sciences and Interdisciplinary Studies, California State University, Sacramento; 1 year experience as a Environmental Planner. Contribution: Negative Declaration/Initial Study.

Schinke, Kendall, Associate Environmental Planner; PQS, Lead Archaeological Surveyor. B.A. in Anthropology, M.A. in progress. 11 years experience in California Archaeology.

Snow, Jerry, Associate Environmental Planner (Generalist). B.S. in Environmental Science, Humboldt State University; 4½ years of professional experience in environmental and transportation planning. Environmental Coordinator

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Appendix A Mitigation Monitoring Program

A meeting will be held with the Caltrans Construction Resident Engineer (RE) regarding all the design features and mitigation, minimization and avoidance measures described in this document. The RE will be responsible for ensuring that all mitigation, minimization, and avoidance measures will be implemented throughout the construction.

Replanting will be performed by Caltrans Landscape Architecture unit through a separate contract to an outside agency. The separate revegetation contract is generally an interagency agreement between the California Conservation Corps (CCC) with oversight by Caltrans. Reviews of the replanting will be carried out annually for a term of three years, until it has been determined that the vegetation that was put in place after construction has been fully established.

Table 6. Mitigation, Minimization, and Avoidance Plan

Mitigation, Minimization and Avoidance Measures	Completion Date/Duration	Responsible Party	Monitor	Frequency
Aesthetics- All three proposed retaining walls will have identical treatments as the Type 80 barriers.	Complete at the end of construction tentatively scheduled for summer of 2006.	Contractor, Caltrans RE	Contractor Caltrans RE	The Caltrans RE will have daily oversight of the project and will ensure that the walls and concrete barrier are aesthetically treated.
Disturbed soils will receive erosion/sediment control, which includes hydro seeding, fiber rolls and other soil stabilization measures. During construction as well as post construction re-vegetation efforts will consist only of native species.	During and after construction is complete, tentatively schedule for summer of 2006.	Contractor, Caltrans RE	Contractor Caltrans RE Landscape Architect	The Caltrans RE will have daily oversight of the project and will ensure that erosion controls are in place during construction.
Mature trees that will be cut will be replaced at a ratio of 1 seedling for each 1 inch of Diameter at Breast Height removed.	After construction is complete full revegetation efforts will commence starting in the	Biologist Landscape Architect	Landscape Architect	Landscape Architect will check on revegetation efforts and success of plants at least

Mitigation, Minimization and Avoidance Measures	Completion Date/Duration	Responsible Party	Monitor	Frequency
	summer of 2006 and ending in the fall of 2007.			once a year for a period of three years.
The Metal Beam Guard Rail surface will be treated to remove its shine.	During and after construction is complete, tentatively schedule for summer of 2006.	Contractor, Caltrans RE	Contractor Caltrans RE Landscape Architect	The Caltrans RE will have daily oversight of the project and will ensure that the MBGR surface is treated.
Biological Resources- Only clean, washed, and maintained construction equipment will be permitted to enter the the construction area.	During construction tentatively scheduled to begin in summer of 2006.	Contractor, Caltrans RE	Contractor Caltrans RE	The Caltrans RE will have daily oversight of the project and will ensure that only clean and maintained equipment is allowed onto the project site.
Caltrans or its contractors will limit in-water construction activities at the unnamed stream at KP 43.58 (PM 27.08) to the low or no-flow period (between June 1 and October 15 or before the onset of winter).	During construction tentatively scheduled to begin in summer of 2006.	Contractor, Caltrans RE	Contractor Caltrans RE	The Caltrans RE will have daily oversight of the project and will ensure that the contractor does not work in the stream zone until the specified time frame.
The three trees that will be removed will be slid into the Smith River after being cut to provide resting and rearing habitat for migrating fish species.	During construction tentatively scheduled to begin in summer of 2006.	Contractor, Caltrans RE	Contractor Caltrans RE	The Caltrans RE will have daily oversight of the project and will ensure that the contractor disposes of the trees into the Smith River with rootball.

Mitigation, Minimization and Avoidance Measures	Completion Date/Duration	Responsible Party	Monitor	Frequency
Construction activities will be restricted within two (2) hours of sunrise and sunset during critical breeding season for MAMU (April 1 st – August 5 th) and NSO (March 1 st – June 30 th).	During construction tentatively scheduled to begin in summer of 2006.	Contractor, Caltrans RE	Contractor Caltrans RE	The Caltrans RE will have daily oversight of the project and will ensure that the contractor does not begin daily work during this time period.
Mufflers and noise attenuation devices will be maintained on all construction equipment and vehicles, as will screens around air compressors.	During construction tentatively scheduled to begin in summer of 2006.	Contractor, Caltrans RE	Contractor Caltrans RE	The Caltrans RE will have daily oversight of the project and will ensure that the contractors equipment is maintained and that noise attenuators are placed around stationary equipment.
If construction activities create a visible plume in surface waters, a silt barrier will be constructed downstream of the construction area.	During construction tentatively scheduled to begin in summer of 2006.	Contractor, Caltrans RE	Contractor Caltrans RE	The Caltrans RE will have daily oversight of the project and will ensure that devices are in place to prevent siltation of adjacent waters.
A spill-response plan will be created to prevent raw cement, concrete or concrete washings, asphalt, paint or other coating materials, oil or other petroleum products contaminating the soil or entering watercourses, drainages and waterways.	Prior to the project beginning construction.	Contractor, Caltrans Project Engineer	Contractor Caltrans RE	During the contract approval process the Caltrans PE will ensure that the contractor prepared a spill response

Mitigation, Minimization and Avoidance Measures	Completion Date/Duration	Responsible Party	Monitor	Frequency
				plan.
Hazards and Hazardous Materials- Construction contractor, or the contractor's listed environmental sub-contractor, shall prepare a Site Safety Plan. The Site Safety Plan, at a minimum, must identify, evaluate, and control safety and health hazards, and provide for emergency response for hazardous waste operations.	Prior to the project beginning construction.	Contractor, Caltrans Project Engineer	Contractor Caltrans RE	During the PS&E review and the contract approval process the Caltrans PE will ensure that the contractor prepared a spill response plan.
Noise Affects- Construction activities will be restricted within two (2) hours of sunrise and sunset during critical breeding season for MAMU (April 1 st – August 5 th) and NSO (March 1 st – June 30 th).	During construction tentatively scheduled to begin in summer of 2006.	Contractor, Caltrans RE	Contractor Caltrans RE	The Caltrans RE will have daily oversight of the project and will ensure that the contractor does not begin daily work during this time period.
Hydrology and Water Quality- Preparation of a SWPPP that details the monitoring and implementation of BMPs for erosion and siltation prevention.	Prior to the project beginning construction.	Contractor, Caltrans Project Engineer	Contractor Caltrans RE	During the PS&E review and the contract approval process the Caltrans PE will ensure that the contractor prepared a spill response plan.
Special conditions in the ACOE 404 permit, CDFG 1602 permit and NCRWQCB certification will have to be adhered to.	Prior to the project beginning construction.	Caltrans Project Engineer and Biologist	Contractor Caltrans RE	All permits will need to be obtained prior to the beginning of construction, generally during the PS&E review period.

Appendix B Environmental Checklist

The following checklist identifies physical, biological, social and economic factors that might be affected by the proposed project. The CEQA impact levels include potentially significant impact, less than significant with mitigation incorporation, less than significant impact, and no impact. In many cases, background studies performed in connection with the project indicate no impacts. A “no impact” under CEQA reflects this determination. Any needed discussion is in the corresponding section of the Initial Study with the same heading. Please refer to the following for detailed discussion regarding impacts:

- Guidance: Title 14, Chapter 3, California Code of Regulations, Sections 15000 et seq. (http://www.ceres.ca.gov/topic/env_law/ceqa/guidelines/)
- Statutes: Division 13, California Public Resource Code, Sections 21000-21178.1 (http://www.ceres.ca.gov/topic/env_law/ceqa/stat/)

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
I. AESTHETICS -- Would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
II. AGRICULTURE RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
III. AIR QUALITY -- Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
IV. BIOLOGICAL RESOURCES -- Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

V. CULTURAL RESOURCES -- Would the project:

a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

VI. GEOLOGY AND SOILS -- Would the project:

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

VII. HAZARDS AND HAZARDOUS MATERIALS –

Would the project:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
VIII. HYDROLOGY AND WATER QUALITY -- Would the project:				
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
IX. LAND USE AND PLANNING - Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
X. MINERAL RESOURCES -- Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
XI. NOISE –				
Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
XII. POPULATION AND HOUSING -- Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
XIII. PUBLIC SERVICES				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
XIV. RECREATION –				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
XV. TRANSPORTATION/TRAFFIC -- Would the project:				
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Result in inadequate parking capacity?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

XVI. UTILITIES AND SERVICE SYSTEMS –

Would the project:

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
XVII. MANDATORY FINDINGS OF SIGNIFICANCE –				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Appendix C Project Plans & Mapping

The following pages contain APE/Design mapping for the proposed project.

The curve correction project is denoted by Station Numbers. The Station Numbers start at 434+52.00 along SR 199 and increase in value northward. The following layouts have the Station Numbers marked on the centerline of the highway. The Station Numbers are in meters and only cover the project limits (43.1-44.3).

Each tick mark between stations = 20 meters.

Example: Total distance between station 435+00 and 436+00 = 100 meters.

Appendix D USFS Scenic Byway Concurrence

Don Pass dpass@fs.fed.us
05/07/2004 09:41 AM

To: Robert_Rosas@dot.ca.gov
cc: Don Pass <dpass@fs.fed.us>

Subject: Re: SR 199 Del Norte County E.A. 409600 Scenic Byway Coordination/Curve Realignment Project/Type 80 Rail.

Yes this is exactly what we were looking at and will suffice for Scenic Byway concurrence.

Robert_Rosas@dot.ca.gov
05/06/2004 08:45AM

To: dpass@fs.fed.us
cc:
Subject: SR 199 Del Norte County E.A. 409600
Scenic Byway Coordination/Curve Realignment
Project/Type 80 Rail

Hi Don,

Here is some information that I have received from the Project Manager concerning the Type 80 rail for this project since we last spoke. Please let me know if this information will suffice for Scenic Byway concurrence?

Thank you very much,

ROBERT ROSAS, JR
Environmental Coordinator
916) 274-0620
8-436-0620

Appendix E USFS Wild & Scenic River Concurrence

Don Pass dpass@fs.fed.us
07/09/2004 08:16 AM

To: Robert_Rosas@dot.ca.gov
cc: Don Pass <dpass@fs.fed.us>

Subject: Re: SR 199 Del Norte County E.A. 409600 Wild & Scenic River Scenic River Concurrence.

Robert the information in the documents submitted will suffice for Wild and Scenic River Concurrence.

Appendix F NOAA & USFWS Concurrence Letters

The following pages contain the USFWS and NOAA Fisheries informal consultation letters concurring with the Caltrans determinations that there will not be any adverse affects on fish or wildlife as a result of this project.



United States Department of the Interior



FISH AND WILDLIFE SERVICE

Arcata Fish and Wildlife Office

1655 Heindon Road

Arcata, CA 95521-5582

Phone: (707) 822-7201 Fax: (707) 822-8411

In Reply Refer To:
AFWO 1-14-2003-1844.1

JUN 03 2004

Jody Brown
Office of Environmental Management Branch S-3
California Department of Transportation District 3
2389 Gateway Oaks Drive
Sacramento, California 94274-0001

Subject: Informal Consultation on the proposed Curve Realignment and Rehabilitation Project, located on State Route 199, Del Norte County, California (01-DN-199 PM 27.0-27.5)

Dear Ms. Brown:

This letter responds to your March 22, 2004, correspondence requesting the U.S. Fish and Wildlife Service's (Service) concurrence with your determination of effects for the proposed Curve Realignment and Rehabilitation Project (action) located between mileposts 27.0 and 27.5 on State Route 199, east of Crescent City, in Del Norte County, California. Your correspondence was received at the Arcata Fish and Wildlife Office on April 5, 2004. You determined that the proposed action may affect but is not likely to adversely affect the following Federally listed species: the threatened northern spotted owl (*Strix occidentalis caurinus*) (owl) and the marbled murrelet (*Brachyramphus marmoratus*) (murrelet). You have also determined that the proposed action will have no effect on critical habitat for any listed species; therefore, critical habitat will not be discussed further in this consultation. This response is prepared in accordance with the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.) (Act) and its implementing regulations (50 CFR §402).

This informal consultation is based on information provided in your March 23, 2004, biological assessment. That document contains a description of the proposed action, the status of the species, and the effects of the proposed action, and is hereby incorporated by reference. The following additional sources of information are also incorporated by reference: telephone conversations between Service biologist Ray Bosch and Caltrans biologists Richard Burg and Michele Lukkarila, and draft biological assessments. A complete administrative record for this consultation is on file in this office.

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IN AMERICA 

Description of the Proposed Action

Caltrans proposes to realign and rehabilitate highway curves at three locations along State Route 199 from Post Mile 27.0 to 27.5 in Del Norte County, California. The action is scheduled for completion over a two-year period during the dry season (May - September). Construction would consist primarily of erecting, excavating and backfilling three retaining walls for the purpose of increasing the radius of these road curves with the intent of improving travel safety at these sites, fixing a chronic road failure, and road resurfacing. The retaining walls would be placed on the river side of the roadway. One existing culvert would be replaced. All work would be completed above the ordinary high water mark of the Smith River, and all equipment would be operated from the existing roadway. Some rock chiseling will be done using a hoe-ram mounted on an excavator, on the inboard side of one realignment site. Staging of equipment and supplies will occur on existing road shoulders at the site or at the nearby, existing Idlewild Maintenance Station. Various heavy equipment will be used during the construction. Two isolated Douglas-fir (*Pseudotsuga menziesii*) trees less than 50 inches in diameter at breast height (dbh) and one 25-inch dbh hardwood would be cut to make room for one retaining wall. The trees would be moved downslope to create fish habitat in the river. The action area includes all areas within one-quarter mile of the footprint of this linear project site.

To minimize or avoid adverse effects from construction noise to owls and murrelets that might use the action area, Caltrans proposes to implement the following conservation measures: (1) prohibit construction activities within 2 hours of sunrise and sunset during part of the critical breeding season for murrelets (April 1 - August 5) and spotted owls (March 1 - June 30); (2) use portable noise screens and sound attenuation devices around construction equipment; and, (3) maintain construction vehicles and equipment, especially mufflers, in good working order.

Environmental Baseline in the Action Area

There are no known owl sites within the action area despite relatively extensive owl surveys in past years, according to personal communications with Forest Service biologists, as reported in the biological assessment. The nearest known owl nesting site is located along Monkey Creek, approximately 1.5 miles (2.2 km) away. Habitat in and adjacent to the action area is a mixture of seral stages and forest types, ranging from mixed hardwoods to open mature conifer forests. None of the action area is classified as significant old growth, so has a low likelihood of providing nesting/roosting habitat for the owl.

There are no known marbled murrelet nests within the action area; the nearest known murrelet nest occurs 8 miles (13 km) west of the project site. The project site occurs approximately 22 straight-line miles (35 km) from the Pacific Ocean, which is nearly the maximum distance from the ocean at which murrelets have been detected in California. The likelihood murrelets would be detected at the project site is very low.

The action is located in the Klamath Physiographic Province and the Western Klamath Ecozone.

Effects of the Proposed Action

Three trees will be removed as part of the proposed action. These three trees, while of suitable size to comprise suitable habitat for the northern spotted owl or marbled murrelet, are isolated from any contiguous patch of suitable habitat and are exposed by the bank of the river and the existing roadway. Their isolation and exposure makes them unlikely to be used as breeding habitat for these species. Other vegetation removal includes only small trees and shrubs, primarily riparian species, which do not comprise significant components of suitable habitat for these species. This habitat degradation is considered to be temporary except for very minor permanent losses due to slight increases in the width of the road pavement. Despite relatively intensive surveys for owls in this area, the nearest known owl site is at least 1.5 miles distant. The nearest known murrelet nest site is approximately 8 miles away. Therefore, the likelihood of either species occurring in the action area is low to very low.

A noise study of the project was completed; it is described in Appendix B of the biological assessment. Noise levels generated by the proposed construction equipment is approximately equal to or slightly exceeds the noise level on the existing roadway, a moderately used state highway. Restriction of the daily work period from 2 hours after sunrise to 2 hours before sunset will further minimize any effects to owls or murrelets that might use the area for nesting purposes.

Concurrence

The Service concurs with your determination that the proposed action may affect but is not likely to adversely affect the northern spotted owl, based on the following factors:

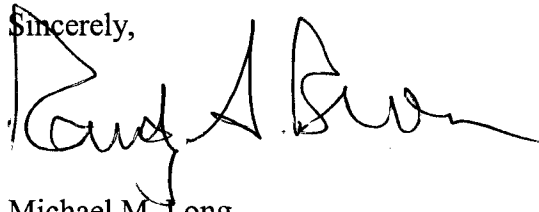
1. No significant suitable habitat for the northern spotted owl will be removed, degraded or downgraded. Trees to be removed, while of sufficient size to constitute suitable habitat, are isolated from contiguous habitat and are exposed to wind and excessive existing road noise, so are very unlikely to function as suitable habitat.
2. The nearest known northern spotted owl nest site is nearly 1.5 miles from the site of the proposed action.
3. Noise levels generated by the construction activities are not likely to be significant adverse effects due to conservation measures implemented during the construction and the high levels of noise on the existing highway.
4. The activity will have no effect on critical habitat.

The Service concurs with your determination that the proposed action may affect but is not likely to adversely affect the marbled murrelet, based on the following factors:

1. No significant suitable habitat for the marbled murrelet will be removed, degraded or downgraded. Trees to be removed, while of sufficient size to constitute suitable habitat, are isolated from contiguous habitat and are exposed to wind and excessive existing road noise, so are very unlikely to function as suitable habitat.
2. The nearest known marbled murrelet nest site is nearly 8 miles from the site of the proposed action.
3. The project location is nearly as far inland as the most inland located known murrelet nest tree in California. Therefore, the likelihood of murrelets occurring in the vicinity of the project is very low.
4. Noise levels generated by the construction activities are not likely to be significant adverse effects due to conservation measures implemented during the construction and the high levels of noise on the existing highway.
5. The activity will have no effect on critical habitat.

Conclusion

This concludes informal consultation on the proposed Curve Realignment and Rehabilitation Project, located on State Route 199, Del Norte County. Unless new information reveals that the proposed action (1) may affect listed species in a manner or to an extent not considered in your correspondence, (2) the action is modified in a manner that causes an effect on the listed species or critical habitat not considered in your correspondence, or (3) a new species is listed or critical habitat is designated that may be affected by the proposed action, no further action pursuant to the Act is necessary. Please contact staff biologist Ray Bosch at (707) 822-7201 should you have further questions regarding this consultation.

Sincerely,

Acting
SA
Michael M. Long
Field Supervisor

cc:

California Department of Transportation, Sacramento, California (Attn: Michele Lukkarila)



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southwest Region
501 West Ocean Boulevard, Suite 4200
Long Beach, California 90802-4213

MAY 04 2004

In response refer to:
151422SWR04AR9098:MK

Ms. Jody Brown
Chief, Environmental Branch S-3
California Department of Transportation
2389 Gateway Oaks Drive
Sacramento, California 94274-0626

Dear Ms. Brown:

Thank you for your request of January 15, 2004, to initiate Endangered Species Act (ESA) section 7 informal consultation [as a Designated Non-Federal Representative through the Federal Highway Administration (FHWA)] with the National Marine Fisheries Service (NOAA Fisheries) on the State Route 199 Curve Realignment Project from post mile 27.0 to 27.5 in Del Norte County, California, along the Middle Fork of the Smith River (Proposed Project). You asked NOAA Fisheries to concur with your determination that the Proposed Project may affect, but is not likely to adversely affect Federally threatened Southern Oregon/Northern California Coast (SONCC) coho salmon (*Oncorhynchus kisutch*), and would not destroy or adversely modify critical habitat for SONCC coho salmon.

The purpose of the Proposed Project is to improve safety at this location by erecting and backfilling three retaining walls between the road and the river, and chiseling back a rock outcrop on the opposite side of the road. The retaining wall piles will be driven from the existing roadbed, and all construction work will take place above ordinary high water. Three trees (45- and 50-centimeter diameter Douglas firs, and a 25.5-centimeter diameter canyon live oak) will be removed. However, these trees will be removed from the ground with their root masses left intact as much as possible, and placed on the river bank so that they may be recruited into the river during high water.

NOAA Fisheries has analyzed the Proposed Project for possible adverse effects to SONCC coho salmon and its critical habitat. Project elements that have the potential to adversely affect coho salmon include loss of riparian trees, temporary increases in turbidity during and after construction, and spills of hazardous material.

Of the Proposed Project's individual elements, NOAA Fisheries thinks that the removal of the three trees is the most likely element to effect coho salmon and their habitat. In determining the possible adverse effects to coho salmon of removing these trees, we examine the various functions typically provided by riparian trees, and assess the potential adverse effects to coho salmon for reduction in each function.



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Riparian trees help maintain cool stream temperatures by providing shade, and by providing a cool and humid microclimate. Riparian trees provide food resources for the aquatic ecosystem in the form of leaves, branches, and terrestrial insects (allochthonous input). Riparian trees stabilize streambanks, and help filter sediment, chemicals, and nutrients from upslope sources. Trees in the riparian zone also supply large wood to the stream channel, which helps maintain channel form and provides instream habitat. The Middle Fork of the Smith River in this reach has a relatively intact riparian canopy between the road and river, and on the opposite side of the river. NOAA Fisheries expects that any effects to coho salmon due to the Proposed Project's impairment of these riparian functions will be insignificant because (1) the area of disturbance is extremely small relative to the watershed; (2) cumulative impacts are not an issue as the watershed lies entirely within the Six Rivers National Forest (SRNF), and all other practices on the SNRF must protect these riparian functions; and (3), as described above, Caltrans will place the removed trees on the river bank so that they may be recruited into the river during high water, thereby providing habitat that would otherwise potentially be lost if the trees were removed from the site.

NOAA Fisheries has examined the proposed management practices that are intended to reduce or eliminate adverse impacts associated with turbidity and hazardous materials. NOAA Fisheries finds that the proposed practices are adequate to reduce the likelihood of these adverse impacts to a level of insignificance. Additionally, NOAA Fisheries finds that there will be no interrelated or interdependent actions resulting from the Proposed Project that could adversely impact SONCC coho salmon and their Designated Critical Habitat.

Conclusion

NOAA Fisheries concurs with the finding that the Proposed Project is not likely to adversely affect Federally threatened SONCC coho salmon, and has determined that the Proposed Project is not likely to adversely affect SONCC coho salmon critical habitat. This concludes ESA consultation in accordance with 50 CFR § 402.14(b)(1) for the State Route 199 Curve Realignment Project. However, further consultation may be required if: (1) new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered, (2) the action is subsequently modified in a manner or to an extent not previously considered, or (3) a new species is listed or critical habitat designated that may be affected by the action.

Please contact Mr. Mike Kelly at (707) 825-5178 if you have any questions.

Sincerely,



Rodney R. McInnis
Acting Regional Administrator

Appendix G Title VI Policy Statement

DEPARTMENT OF TRANSPORTATION
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July 26, 2000

TITLE VI POLICY STATEMENT

The California State Department of Transportation under Title VI of the Civil Rights Act of 1964 and related statutes, ensures that no person in the State of California shall, on the grounds of race, color, sex and national origin be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity it administers.

A handwritten signature in black ink that reads "Jeff Morales".

JEFF MORALES
Director

Figure 2. Trees To Be Removed

Trees scheduled to be removed (slide downslope to create habitat for fisheries) for the Caltrans curve realignment project, Del Norte County, CA.



Figure 3. Type 80 Concrete Railing

